DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024611 Address: 333 Burma Road **Date Inspected:** 12-Jan-2011

City: Oakland, CA 94607

OSM Arrival Time: 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China

CWI Name: Oiu Wei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

NDT

OBG Bay 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 08153.

Magnetic Particle Testing (MT)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG. The weld designations reviewed is as follows:

SEG3007AY-067, 070, 069, 072

WELDING

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This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as DP3172-001-036 located on Deck Plate to Deck Panel Diaphragm of the OBG Segment 14W. The welder is identified as 045133. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-U4b-P4.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as DP3176-001-076 located on Deck Plate to Deck Panel Diaphragm of the OBG Segment 14W. The welder is identified as 067611. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-U4b-P4.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as Seg3013AA-060 located on the OBG Segment 13AW. The welder is identified as 067765. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair and B-WR20128.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as Seg3013V-167 located on the OBG Segment 13AW. The welder is identified as 037780. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair and B-WR20129.

Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3013AU-091 located on Floor Beam to I-Stiffener of the OBG Segment 13AW. The welder is identified as 066239. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3013AX-087 located on Floor Beam to I-Stiffener of the OBG Segment 13AW. The welder is identified as 066421. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3013AX-140 located on Floor Beam to I-Stiffener of the OBG Segment 13AW. The welder is identified as 068445. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

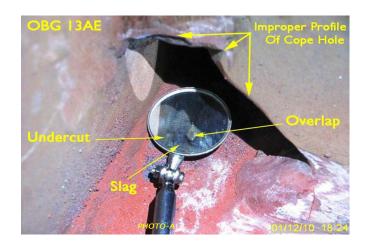
The following weld did not appear to comply with the applicable contract documents:

WELDING INSPECTION REPORT

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This QA observed improper profile of cope hole, overlap, undercut and slag on cope holes located on Stiffener RS3098D to FB3123A & FB3110A at PP119-1500 & PP119 of OBG Segment 13AE and cope holes located on RS3098B to FB3123A & FB3110A at PP119-1500 & PP119 of OBG Segment 13AE, This QA informed to ZPMC Quality Control (QC) indentified as Mr. Wang Xu, and American Bridge Fluor (ABF) QA identified as Mr. Yu Jiao. For further information, please see the attached pictures "A" and "B" below:

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

No relevant conversations were reported on this date.

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Singh,Vikram	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer